

ABSTRACT OF THE DISCLOSURE

The self-calibrating carbon monoxide detector and method of the present invention utilize the gas for which the detector was designed to detect as the calibration gas. Specifically, a carbon monoxide gas generator is included in the detector assembly, and is controlled to produce a known amount of CO. The sensor response to the quantity of CO generated is monitored, and the calibration thereof adjusted as necessary. The operation of the gas generator is also monitored, and any failures are flagged for user attention. The gas generator specifically suppresses the generation of hydrogen through the materials used in its construction. Temperature effects may also be compensated either through control of the gas generation control parameters or compensation of the sensor output in view of the generator temperature effects.

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